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MEMOIR No. 38

NORTH AMERICAN CORDILLERA

FORTY-NINTH PARALLEL

BY

REGINALD ALDWORTH DALY

PART III

GEOLOGICAL SURVEY
DEPARTMENT OF MINES
OTTAWA
1912

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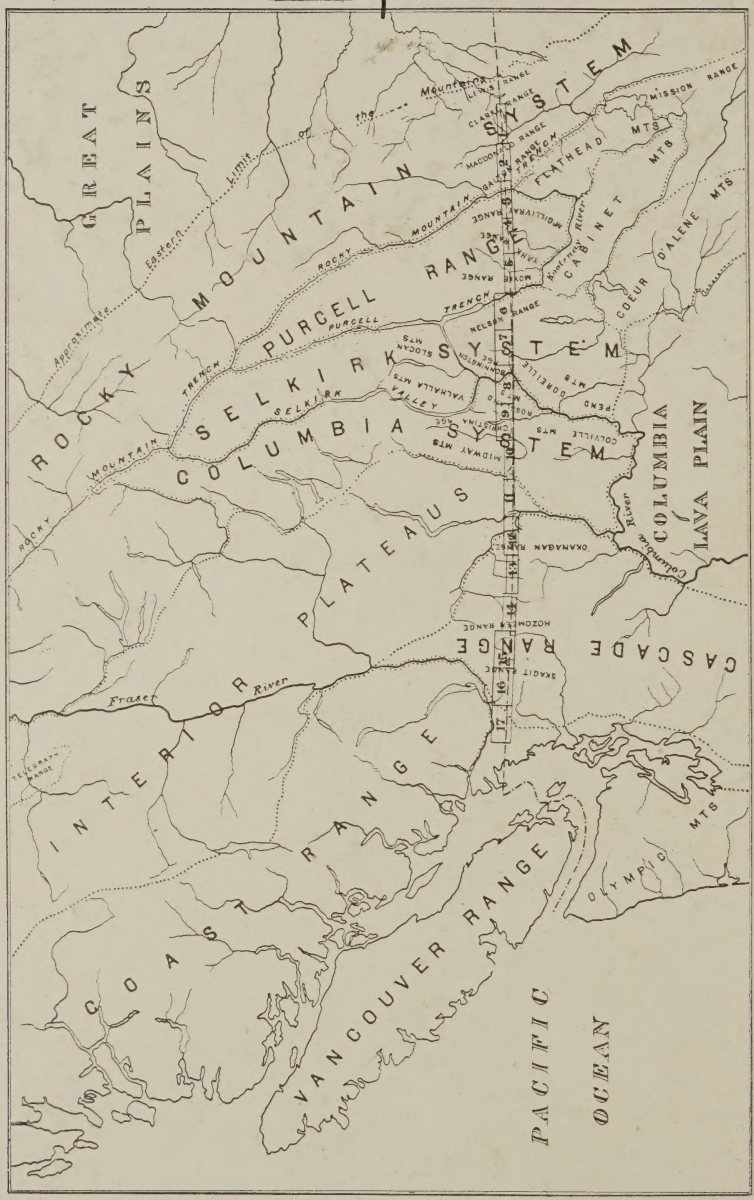


Key Showing Position of Sheets.

SHEET 17. SUMAS LAKE

ERRATUM

Boundary Monument 19 is 0.94 miles west of Mon. 20

LEGEND

PLEISTOCENE AND RECENT

Alluvium and glacial drift
(north of Boundary Line)

(?) EOCENE

Hu
Huntingdon formation
sandstone, conglomerate, shale and thin coal-beds

TRIASSIC

C
Cultus formation
chiefly dark-grey to black argillite, with sandstone and fine-grained conglomerate.

CARBONIFEROUS and older(?)

Ch
Chilliwack series
argillite, sandstone and fine conglomerate (here unfossiliferous)

Intrusive

Sumas batholith
granite

Sumas diorite
cut by granite (plutonic breccia)

CARBONIFEROUS (?) JURASSIC

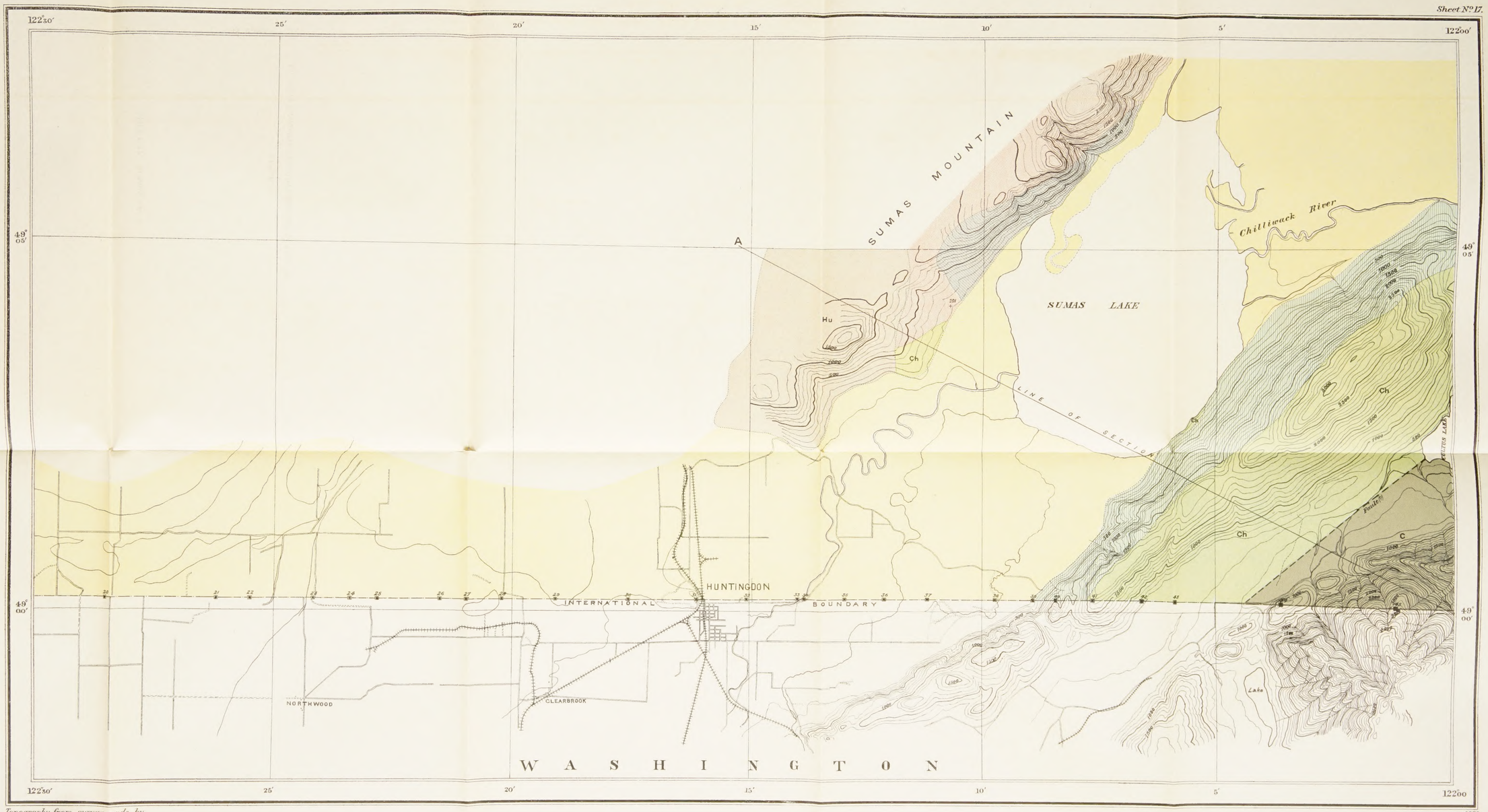
Vedder greenstone

Symbols

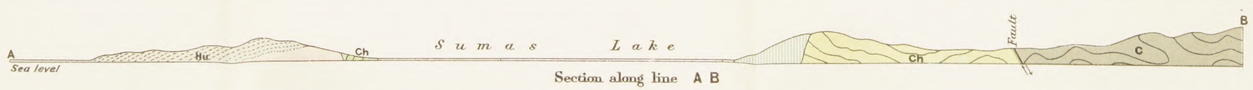
Geological boundary

Fault(?)

Note. *Localities of chemically analyzed rocks, shown thus, +201*



Topography from surveys made by the Boundary Commission.



Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles: 1 ½ 0 1 2 3 4

Contour interval, 100 feet

MAP 90 A

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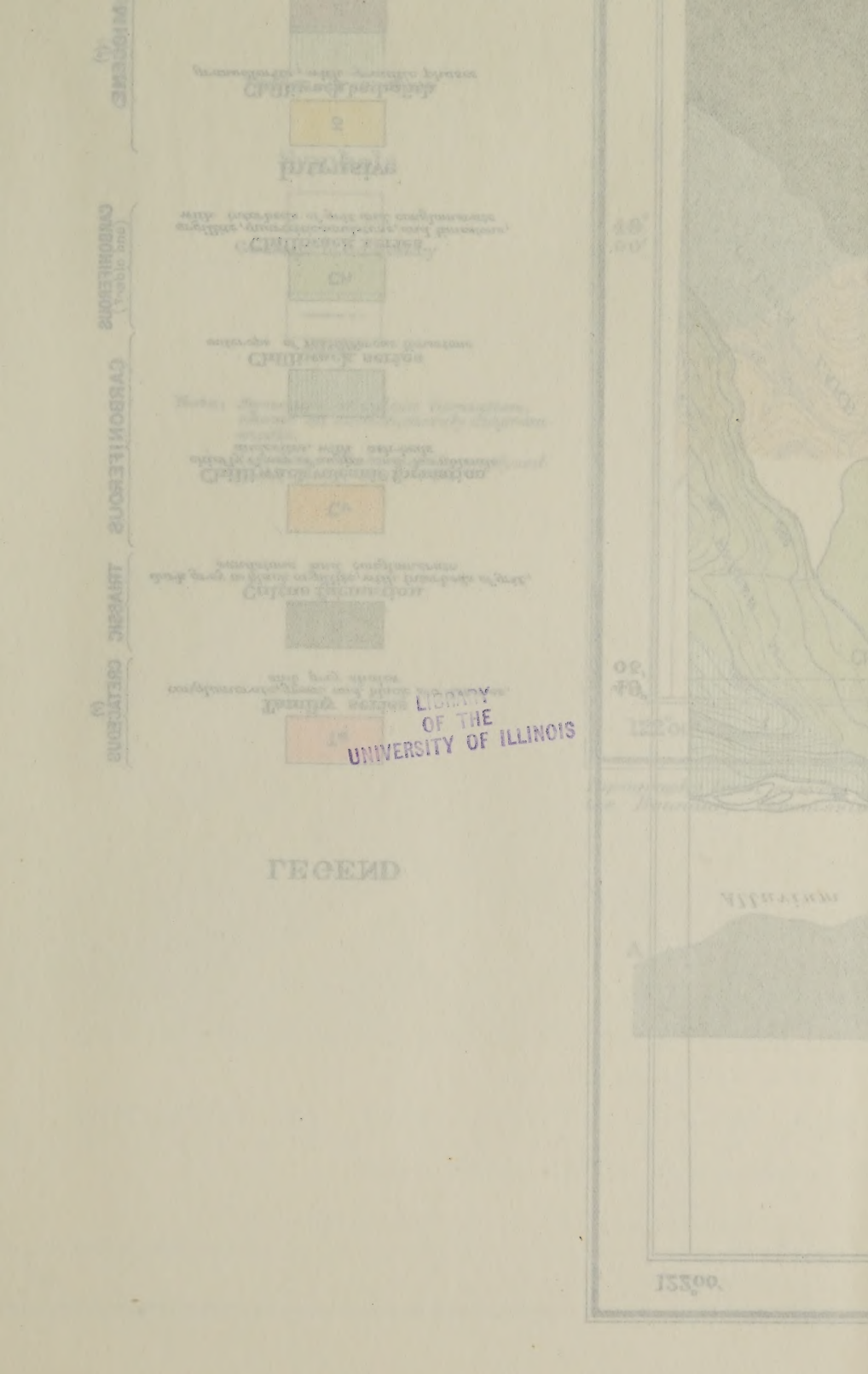
1276



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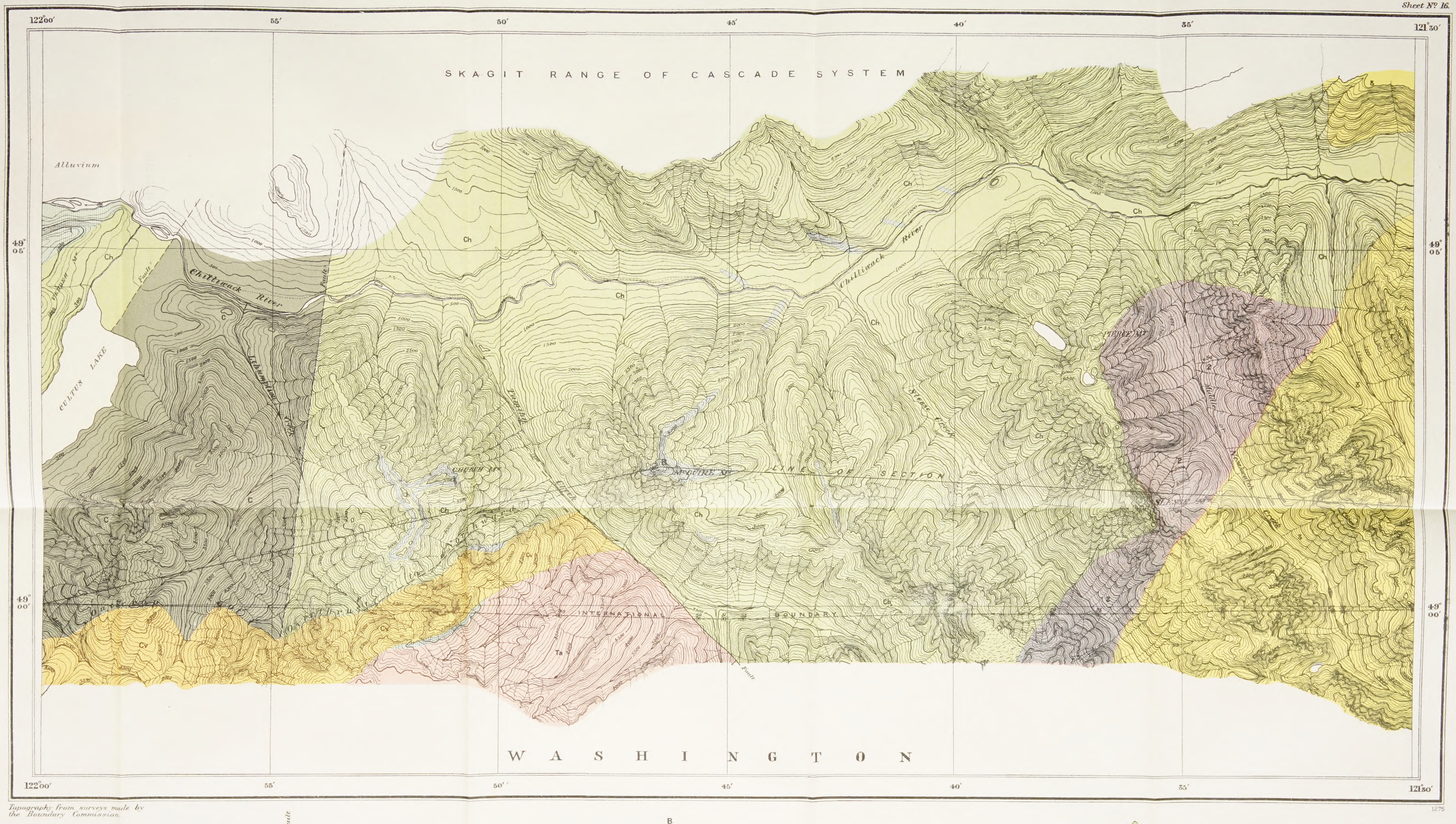
Sheet № 16.



LEGEND

(?) CRETACEOUS

Ta — **Tamihy series**
conglomerate, green and black sandstones, and grey shales

TRIASSIC

C — **Cultus formation**
dark grey to black argillite, with interbeds of grit, sandstone and conglomerate

CARBONIFEROUS

Cv — **Chilliwack volcanic formation**
chiefly flows of augite and hornblende andesites, with ash-beds

Chilliwack series
outcrops of fossiliferous limestone

CARBONIFEROUS (and older?)

Ch — **Chilliwack series**
argillite, quartzitic sandstone, and limestone, with interbeds of grit and conglomerate

Intrusive

(?) MIOCENE

3 — **Chilliwack batholith**
granodiorite, with granitic phases

2 — **Slesse stock**
diorite

(?) CARBONIFEROUS

1 — **Vedder greenstone**

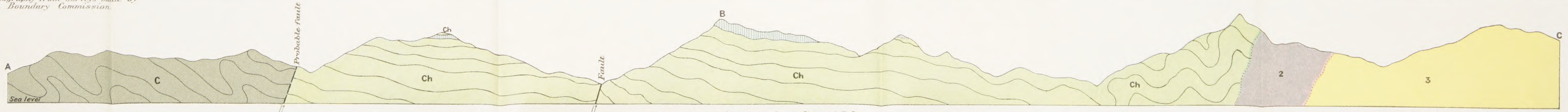
Symbols

Geological boundary

Fault

Note: *Structure of Cultus formation, shown on section, merely diagrammatic.*

Localities of chemically analyzed rocks, shown thus, + 54



Section along line ABC

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles
1 ½ 0 1 2 3 4

Contour interval, 100 feet

MAP 89A

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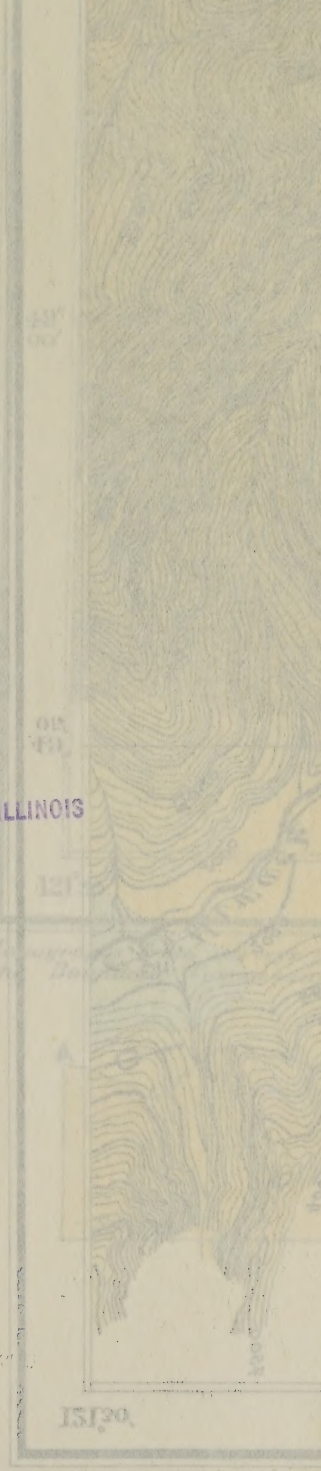

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LEGEND

PLEISTOCENE & RECENT

Glacial drift and alluvium

OLIGOCENE(?)

Skagit volcanic formation
liparite tuff

Skagit volcanic formation
andesite flows and pyroclastic deposits

(?) CARBONIFEROUS CARBONIFEROUS

Ch — Chilliwack series
locally argillite and sandstone

Hz — Hozomeen series
cherty quartzite, greenstone, phyllite, and limestone pods

Intrusive

MIOCENE(?)

Chilliwack batholith
granodiorite
Granite at Skagit River

Monzonite
stock and dikes

JURASSIC(?)

Harzburgite

Custer granite-gneiss
sheared granodiorite

Symbols

Geological boundary

Fault

Glacial striae

Note. Structure of Hozomeen series shown on section, merely diagrammatic. Localities of chemically analyzed rocks shown thus. +7

SKAGIT RANGE OF CASCADE SYSTEM

CHILLIWACK LAKE

CUSTER RIDGE

HOZOMEEN RANGE

INTERNATIONAL BOUNDARY

Chilliwack River

Silver Creek

Lake

Nesikep Creek

Jim Hozomeen Creek

Skagit River

Hozomeen

GLACIER PEAK

WASHINGTON

121°30′ 25′ 20′ 15′ 10′ 5′ 121°00′

49° 05′

49° 00′

Topography from surveys made by the Boundary Commission.

1274

Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

1 ½ 0 1 2 3 4 Miles

Contour interval, 100 feet

MAP 88A

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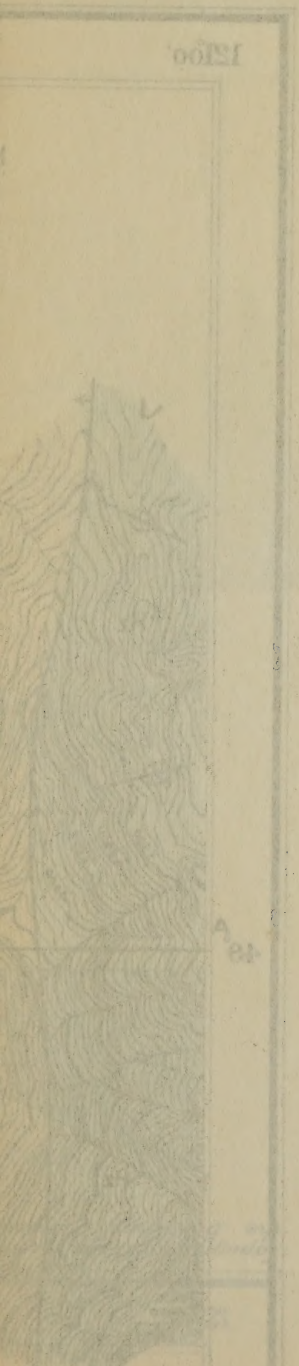

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LEGEND

CRETACEOUS (SHASTA-CHICO) Pasayten series

- L — Member L. *black argillite*
- K — Member K. *green and grey sandstone with interbeds of shale and conglomerate*
- J — Member J. *coarse conglomerate*
- B-1 — Members B to I. *arkose and sandstone chiefly, with conglomerate and shale*

LOWER CARBONIFEROUS (?) CRETACEOUS

- Py — Pasayten volcanic formation. *andesitic breccia*
- Hz — Hozomeen series. *greenstone, cherty quartzite & limestone pods*

Intrusive

JURASSIC (?) MIOCENE (?)

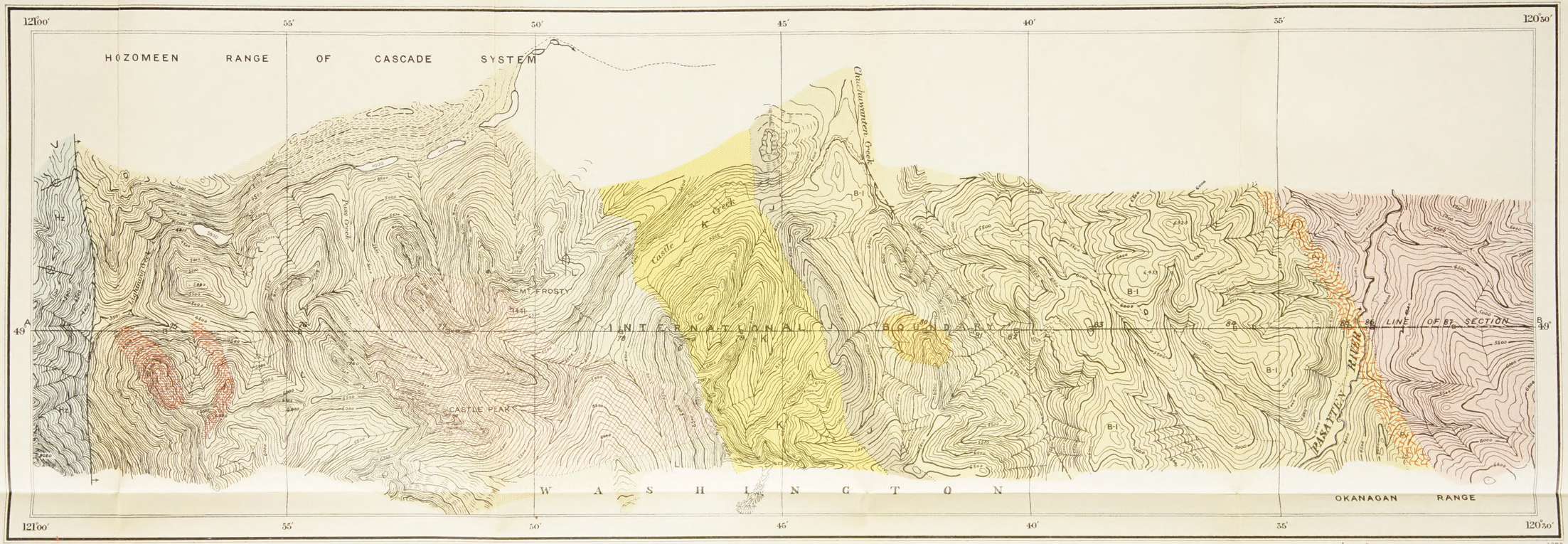
- Syenite porphyry. *chonolith*
- Castle Mountain stock. *granodiorite*
- Lightning Creek stocks. *diorite*
- Remmel batholith. *western phase; sheared granodiorite*

Symbols

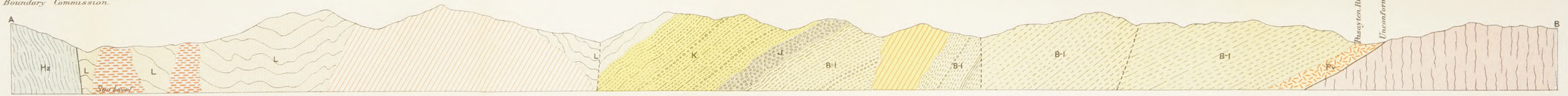
- Geological boundary
- Fault
- Glacial striae

Note. *Structure of Hozomeen series, shown in section, merely diagrammatic.*

Localities of chemically analyzed rocks, shown thus, + 1441



Topography from surveys made by the Boundary Commission.



Section along line AB

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles 1 ½ 0 1 2 3 4

Contour interval, 100 feet

MAP 87A

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LEGEND

PLEISTOCENE

Vesicular dikes of basalt *(Bauerman Ridge)* and andesite *(cutting Basic Complex)*

TERTIARY

Park granite stocks

Cathedral batholith
younger more salic phase

Cathedral batholith
older phase, alkaline biotite granite

LOWER CRETACEOUS

Agglomerate

JURASSIC (?)

Remmel batholith
Eastern phase; highly salic derivative of sheared granodiorite

Remmel batholith
Western phase; sheared granodiorite

LATE PALAEOZOIC (?)

Ashnola gabbro

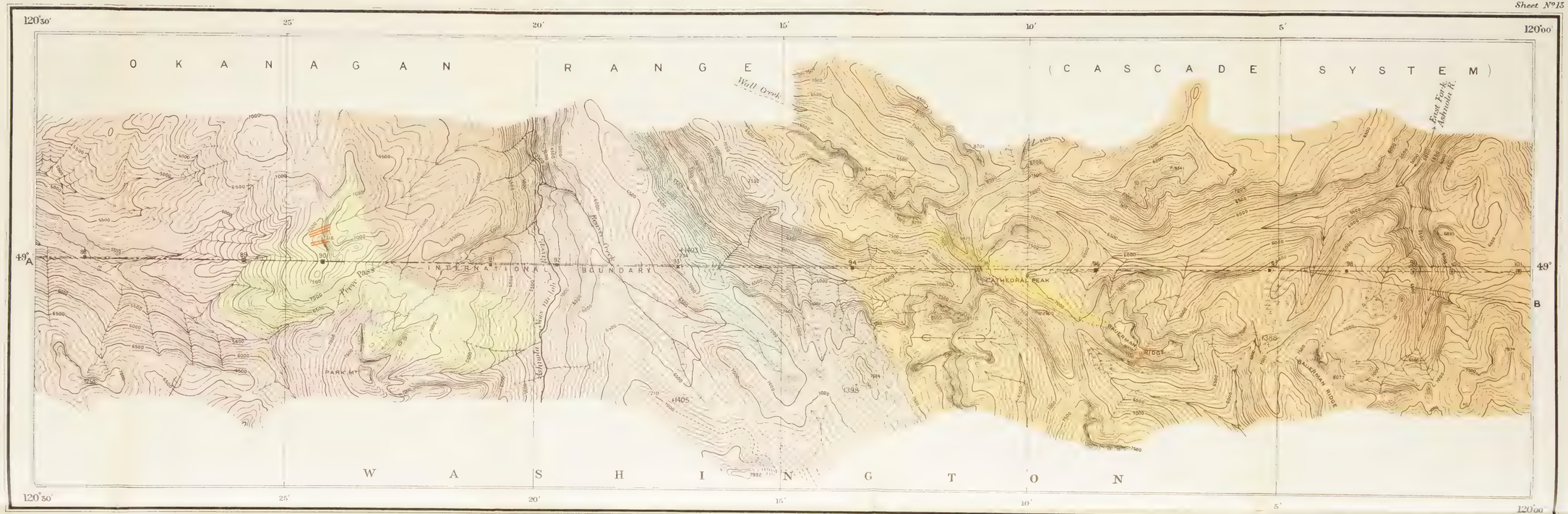
Basic complex

Symbols

Geological boundary

Glacial striae

Note. *Localities of chemically analyzed rocks shown thus.* +1388



Topography from surveys made by the Boundary Commission.

1272

Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale; $\frac{1}{62500}$ = 09864 Statute Miles to 1 Inch

Miles

Contour interval, 100 feet

MAP 86-A

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LEGEND

UPPER PALAEOZOIC(?) & PLEISTOCENE & RECENT

Glacial drift and alluvium

An — Anarchist series
phyllite, slate, quartzite, greenstone, amphibolite, with limestone beds

Intrusive

TERTIARY

Cathedral batholith
alkaline biotite granite

Similkameen batholith
granodiorite

Kruger alkaline body
malignite and eleolite syenite

LATE PALAEOZOIC(?) JURASSIC(?)

Osoyoos gneissic batholith

Basic intrusives of Richter mountain

Peridotite

Symbols

Geological boundary

Glacial striae

Note. Structure of Anarchist series, shown in section, merely diagrammatic.
Localities of chemically analyzed rocks, shown thus, +1100

Topography from surveys made by the Boundary Commission.

Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles

Contour interval, 100 feet

MAP 85 A

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LEGEND

PLEISTOCENE & RECENT
- Glacial drift and alluvium

MIOCENE (?)
- Shackanite — *Flows (part of Midway volcanic group)*
- Extrusive rhomb-porphyry — *Flows (part of Midway volcanic group)*

OLIGOCENE
- KR — Kettle river formation — *sandstone, conglomerate, shale, arkose*

CARBON-IFEROUS (?)
- Limestone of Anarchist series — *white to bluish-grey crystalline*

UPPER PALAEOZOIC
- An — Anarchist series — *quartzite, phillitic slates, greenstones with limestone beds*

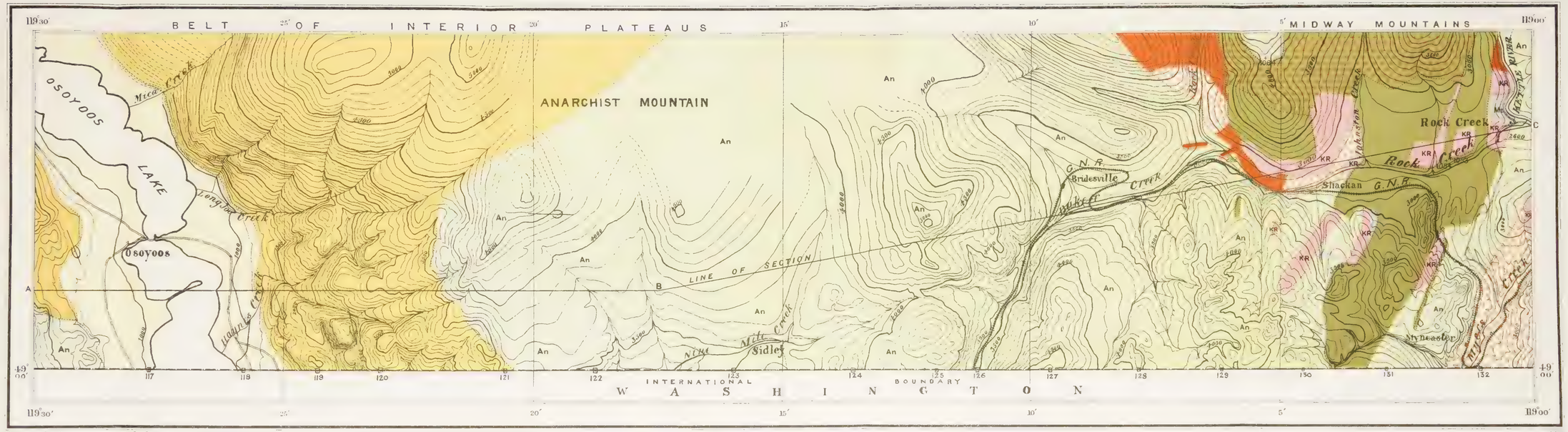
MIOCENE (?)
- Intrusive
- Intrusive rhomb-porphyry — *chemolithe and dikes*

JURASSIC (?)
- Granodiorite
- Osoyoos batholith — *gneissic derivative of granodiorite*
- Diorite and gabbro
- Dunite

PALAEOZOIC (?)

Symbols
- Geological boundary
- Glacial striæ

Note: Structures of Anarchist series, shown in the section, merely diagrammatic
Localities of chemically analyzed rocks, shown thus, +235



Topography from surveys made by the Boundary Commission.

Section along line A B C

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale: $\frac{1}{62500}$ — 0·9864 Statute Miles to 1 Inch

Miles 1 ½ 0 1 2 3 4

Contour interval, 100 Feet

MAP 84A

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LEGEND

(?) QUATERNARY — PLEISTOCENE & RECENT

Alluvium and glacial drift

(?) TERTIARY — MIOCENE

Mt — Midway volcanic group
trachyte and analcitic rhomb-porphyry; flows and pyroclastic deposits

Ma — Midway volcanic group
andesites and basalt; flows and pyroclastic deposits

KR — Kettle river formation
sandstones, conglomerate, shale, arkose

(?) CARBONIFEROUS TO PALAEOZ. — OLIGOCENE

Px — Phoenix volcanic formation
flows and pyroclastic deposits of augite andesite, etc

(?) CARBONIFEROUS

At — Attwood series
argillite, quartzite, limestone

An — Anarchist series
quartzite, phyllitic shales, greystones with some limestone beds

Limestone
crystalline, bluish-grey to white

Ch — Chlorite and hornblende schist

GF — Grand Forks schist
amphibolite, hornblende schists, etc.

Intrusive

(?) TERTIARY — MIOCENE

Pulaskite porphyry
dikes and sills

Rhomb-porphyry

(?) CARBONIFEROUS JURASSIC — OLIGOCENE

Porphyrite
chonolithe, dikes and sills

Granodiorite
stocks, dikes, etc

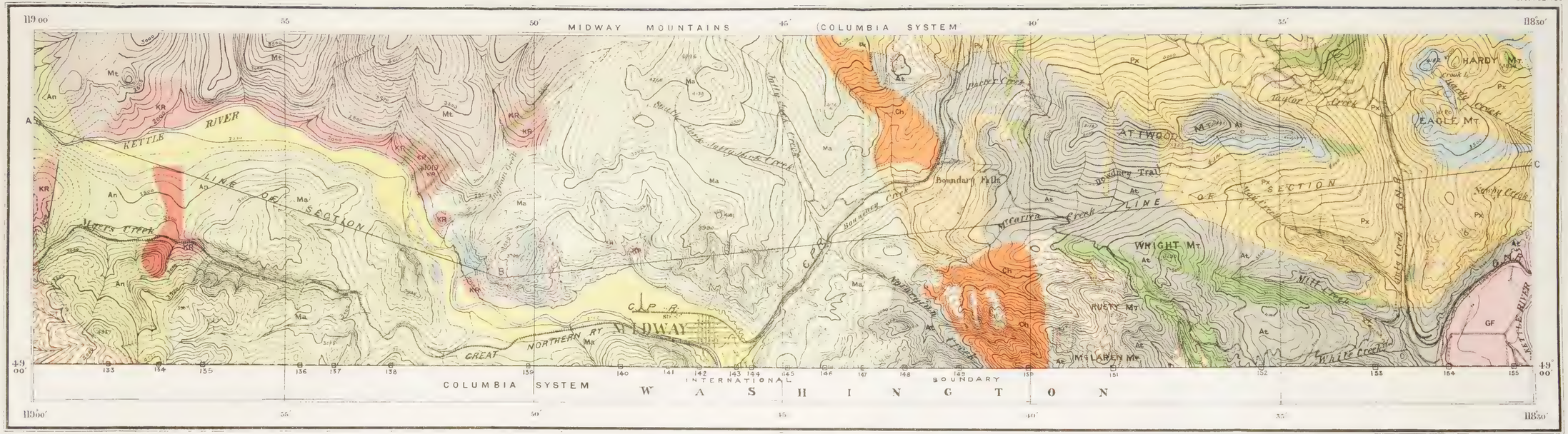
Serpentine
dikes etc

Symbols

Geological boundary

Glacial striae

Note. *Structures shown in schists and limestone merely diagrammatic. On account of the small scale, many dikes and intrusive sheets of porphyrites and porphyries, as well as granodiorite apophyses are not plotted. Similarly many dikes which are cogenetic with the volcanics are not shown.*
Localities of chemically analyzed rocks shown thus. +1010



Topography from surveys made by the Boundary Commission

Section along line A B C

GEOLOGY OF THE FORTY-NINTH PARALLEL. By R. A. Daly.

Scale: $\frac{1}{63360}$ = 0·9864 Statute Miles to 1 Inch

Miles 1 ½ 0 1 2 3 4

Contour interval, 100 feet

MAP 83A

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LEGEND

TERTIARY

Conglomerate

CARBONIFEROUS TO CRETACEOUS(?)

Px — Phoenix volcanic formation
flows and pyroclastic deposits of augite andesites, etc.

Rv — Rossland volcanic formation
flows and pyroclastic deposits of latites, andesites and basalt.

Su — Sutherland schists
phyllite, garnetiferous, epidotic and actinolitic schists, etc.

(?) CARBONIFEROUS PALAEOZOIC(?)

Limestone
white to bluish marble

GF — Grand Forks schists
amphibolite, hornblende schists, etc.

Intrusive

MIOCENE(?)

Coryell batholith
hornblende-biotite syenite (pulaskite)

Syenite porphyry
peripheral (younger) phase of Coryell batholith

EOCENE(?)

Olivine syenite

Hot Springsite

CRETACEOUS(?)

Bitter Creek peridotite

Fife gabbro

Baker gabbro

Dunite

JURASSIC(?)

Smelter stock
aplitic granite

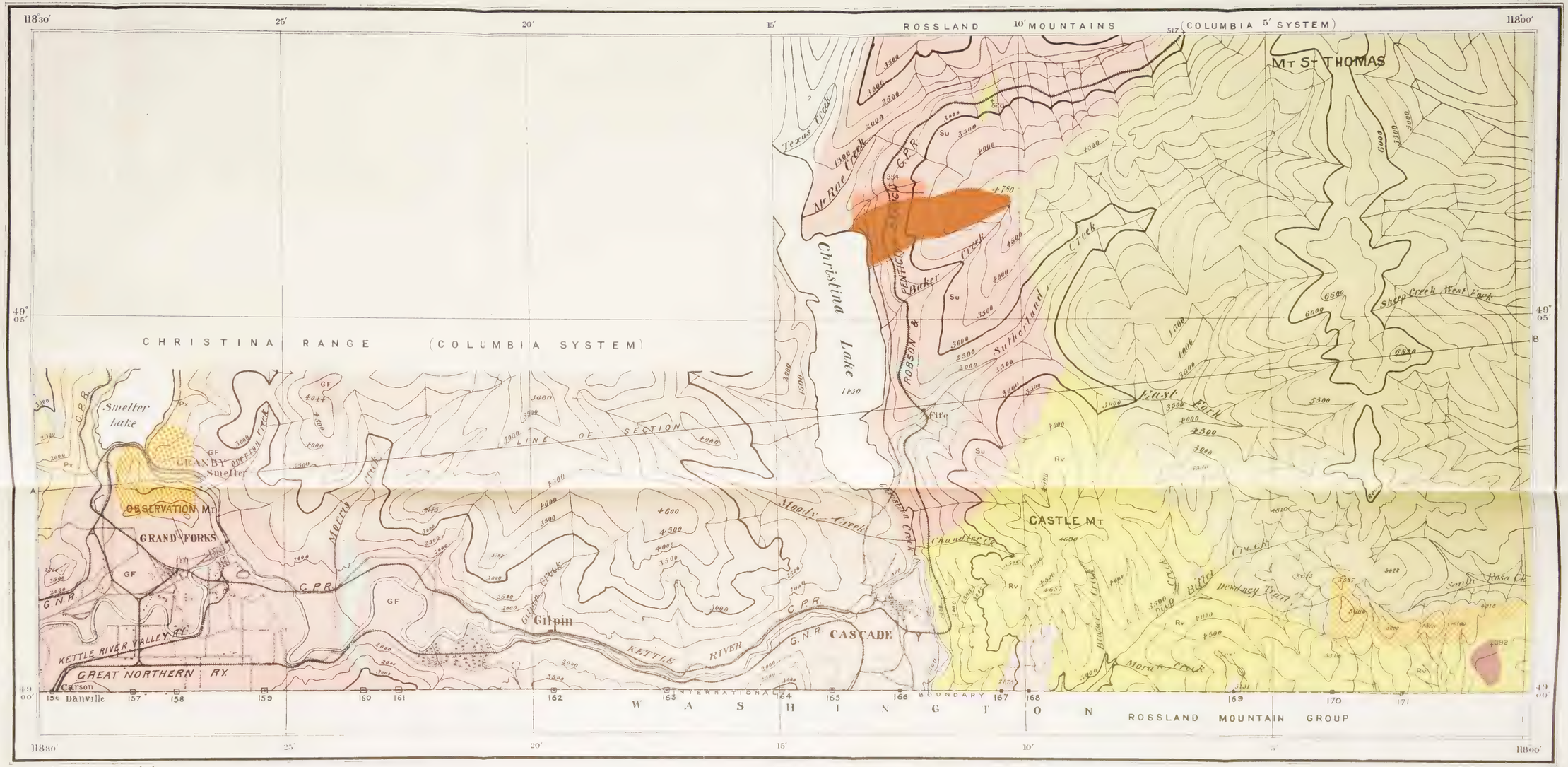
Cascade batholith
oneissic biotite granite-satellitic stock south of Castle mountain

Symbols

Geological boundary

Glacial striae

Note — *Folded structure of Sutherland and Grand Forks schists in section merely diagrammatic.*
Many apophyal dikes from large intrusive masses not shown.
Localities of chemically analyzed rocks shown thus + 517



Topography from surveys made by the Boundary Commission

Section along line AB

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ — 09864 Statute Miles to 1 Inch

Miles 1 ½ 0 1 2 3 4

Contour interval, 500 feet

MAP 32A

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LEGEND

TERTIARY

- Conglomerate — *fossiliferous on Sophie mountain*
- Bs — **Beaver mountain sediments** — *grey and brown shales and sandstones*
- Bv — **Beaver mountain volcanics** — *flows and pyroclastic deposits of augite andesite and basalt*

(?) CARBONIFEROUS TO CRETACEOUS

- Rv — **Rossland volcanic formation** — *flows and pyroclastic deposits of latites, andesites and basalt*

(?) LOWER CARBONIFEROUS

- **Carbonaceous argillite, sandstone, etc.** — *fossiliferous*

CARBONIFEROUS (CARBONIFEROUS TO ORDOVICIAN)

- **Pend D'Oreille limestone** — *white marble, fossiliferous*
- PD — **Pend D'Oreille schist** — *Carbonaceous phyllite with quartzite and greenstone intercalations*

Intrusive

TERTIARY

- **Coryell batholith** — *hornblende-biotite syenite (pulaskite) with phases of eyelite porphyry*
- **Sheppard granite** — *biotite granite; stocks and dikes*

MESOZOIC

- **Shatter-zone of Trail batholith**
- **Trail batholith** — *granodiorite*
- **Rossland monzonite** — *stock*
- **Dunite and Serpentine** — *dikes and chonolith*

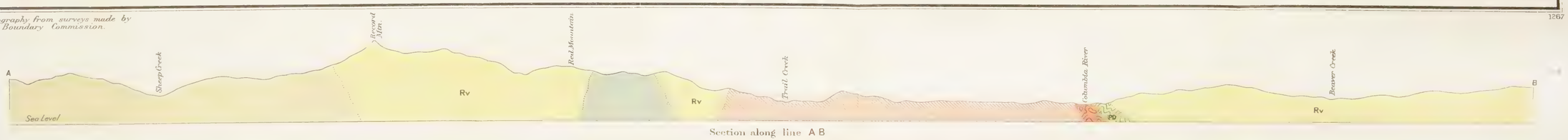
Symbols

- Geological boundary
- Glacial striae

Note: Many minettes and other mica-lamprophyres cut the Pend D'Oreille schists in the Pend D'Oreille river gorge, as well as the older rocks in the Rossland mining camp. Numerous porphyrite dikes syngenetic with the Rossland volcanics are not shown, and apophysal dikes from batholiths and stocks are likewise not plotted.

Localities of chemically analysed rocks, shown thus. +409

Topography from surveys made by the Boundary Commission.



Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to Inch

1 ½ 0 1 2 3 4

Contour interval, 500 feet

MAP. 81 A

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LEGEND

TERTIARY

- **Bs** — Beaver Mountain sediments
- **Bv** — Beaver Mountain volcanics
- **Rv** — Rossland volcanic formation
  flows and pyroclastic deposits of augite andesite and basalt

CARBONIFEROUS (?) CARBONIFEROUS CRETACEOUS(?) TERTIARY

- Pend D'Oreille limestone
  white to bluish, massive marbles

CARBONIFEROUS (?) ORDOVICIAN CARBONIFEROUS

- **PD** — Pend D'Oreille schist
  carbonaceous phyllite with quartzitic and amphibolitic intercalations

MIDDLE CAMBRIAN

- **L** — Lone Star formation
  dark grey, carbonaceous phyllite, with quartz schist and quartzite
- **B** — Beehive formation
  banded quartzite, with thin interbeds of metaphyllite

LOWER CAMBRIAN (?)

- **Rp** — Ripple formation
  massive white quartzite
- **D** — Dewdney formation
  banded quartzite, with conglomerate interbeds

LOWER CAMBRIAN & BELTIAN (?)

- **WF** — Wolf formation
  massive grey grit and arkose in very thick beds; subordinate sandstone
- **Mk** — Monk formation
  alternating phyllites and metamorphosed chiastose grits, sandstones, and conglomerates; grey colours

BELTIAN

- **Iv** — Irene volcanic formation
  thick flows of porphyrite andesites, with some pyroclastics

Intrusive

- Salmon river monzonite
  stock
- Granite
  satellitic to Bayonne batholith
- Olivine syenite
  stock(?)

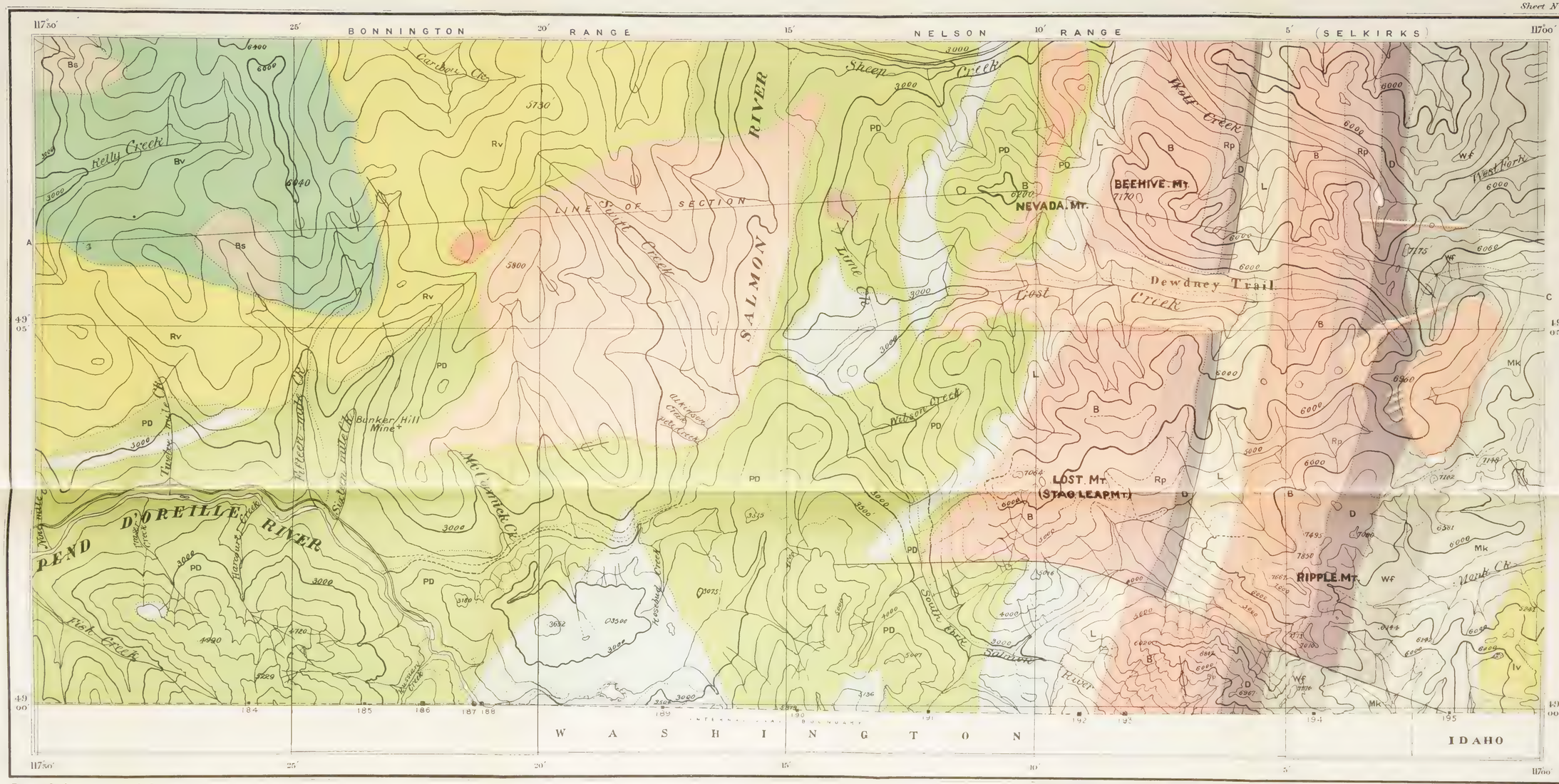
Symbols

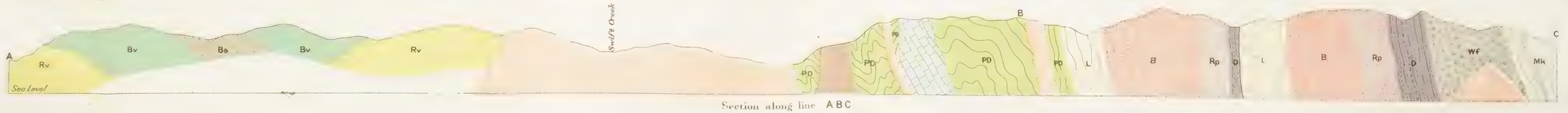
- Geological boundary
- Fault
- Glacial striae

Topography from surveys made by the Boundary Commission

Note. Somewhat numerous, though narrow dikes of minette, cutting the schists in the Pend D'Oreille valley, are not shown

Note. Localities of chemically analyzed rocks, shown thus, + 666





Section along line A B C

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles 1 ½ 0 1 2 3 4

Contour interval: 500 feet

MAP 80A

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LEGEND

Alluvium

Kt — **Kitchener formation**
greenish-grey quartzite

Wf — **Wolf formation**
massive grey grit and arkose in very thick beds, subordinate sandstone

Mk — **Monk formation**
alternating phyllites and metamorphosed (schistose) grits, sandstones and conglomerates, grey colours.

Iv — **Irene volcanic formation**
thick flows of pyroxene andesite, with some pyroclastics and a massive interbed of magnesian limestone

Ic — **Irene conglomerate**
massive, greatly sheared; thin sandstone lenses

A
mica schists, quartzites and dolomites

B
dolomites, quartzite and phyllite

C
phyllites and sericite-quartz schist

D
sheared, massive quartzite, with sericite and chloritic schist

E
sericite schist, spangled with large biotite crystals

F
schistose quartzite and mica schist

G
glittering mica schists and sheared quartzite

Intrusive

Bayonne batholith
basic granodiorite

Rykert batholith
sheared porphyritic biotite muscovite granite

Abnormal hornblende granite
probably a sill

Abnormal hornblende gabbro
sills in Kitchener formation

Greenstone
dikes and sheets in the Priest River terrane

Symbols

Geological boundary

Fault

Glacial striae

Note. *Structure of Pre-Beltian series shown on section, merely diagrammatic. Localities of chemically analyzed rocks, shown thus.* +900

LOWER CAMBRIAN (?) & BELTIAN — MID CAMBRIAN — RECENT

PRE-BELTIAN PRIEST RIVER TERRANE — BELTIAN — CAMBRIAN (?) — JURASSIC (?) TERTIARY

117°00′ 55′ 50′ 45′ 40′ 35′ 116°30′

49° 05′

49° 00′

SELKIRK MOUNTAIN SYSTEM — IDAHO — NELSON RANGE — PURCELL TRENCH

IRENE MT. 6910 — NORTH STAR MT. 6560 — RYKERT MT. 5706

West Fork — South Fork — North Fork — Summit Creek — Leech Lake Creek — Corn Creek — Monk Creek — Priest River — Boundary Creek — Boundary Lakes — Goat River — Creston — Lower Arrow Lake — Columbia River — Kootenay River — Port Hill

LINE OF SECTION

CROWS NEST C.P.R. — G.N.R. — BURLINGTON N.R.

Topography from surveys made by the Boundary Commission.

Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles

Contour interval 500 feet

MAP 79 A

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LEGEND

CAMBRIAN? — L° CAMBRIAN MIDDLE & U° CAMBRIAN? — chiefly MIDDLE CAMBRIAN? RECENT

- Alluvium.
- M — **Moyie formation** — *thin- to thick-bedded shales metargillite and quartzite; white, grey, blackish, greenish & purplish*
- Kt — **Kitchener formation** — *thin- to thick-bedded greenish-grey quartzite and inter-bedded metargillite*
- C — **Creston formation** — *massive to thin-bedded grey quartzite and subordinate metargillite*

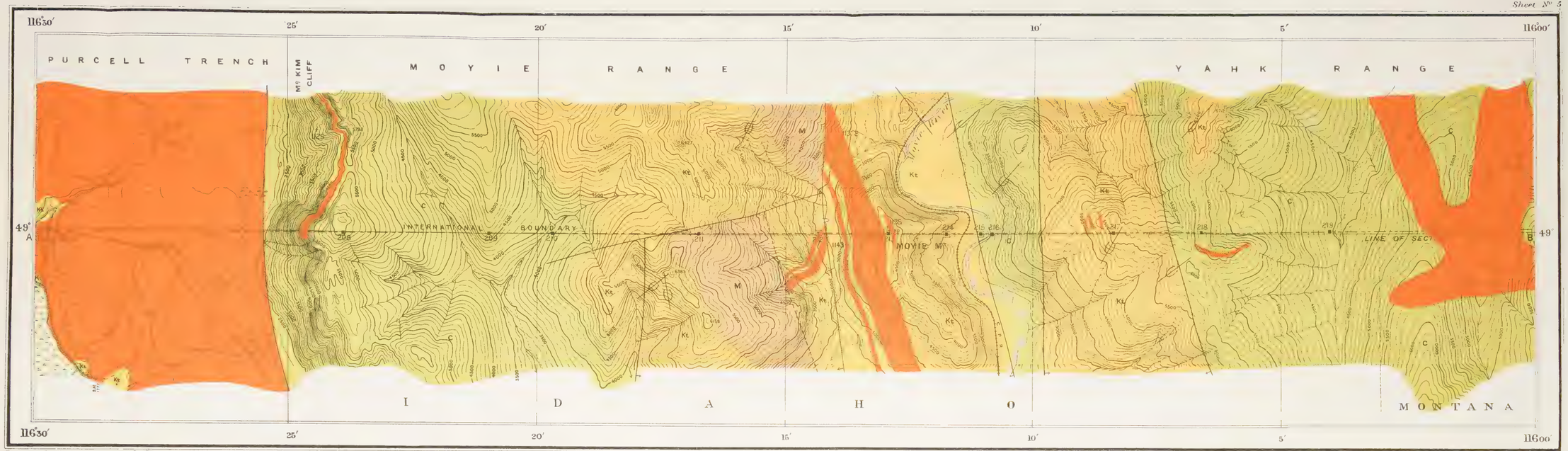
Intrusive

- Abnormal hornblende gabbro

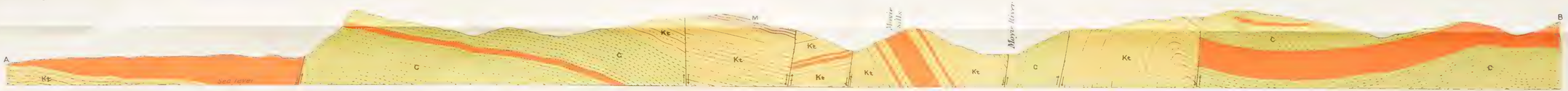
Symbols

- Geological boundary
- Fault
- Glacial striæ

Note. *Localities of chemically analyzed rocks shown thus.* +W34



Topography from surveys made by the Boundary Commission.



Section along line AB

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale $\frac{1}{63360}$ = 0·9864 Statute Miles to 1 Inch

Miles 0 ½ 1 2 3 4

Contour interval 100 Feet

MAP 78A

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LEGEND

CAMBRIAN(?) LOWER CAMBRIAN & BELTIAN CAMBRIAN(?) — Chiefly MIDDLE CAMBRIAN(?)

M — Moyie Formation
thin to thick bedded shales, metargillites and quartzites; white, grey, blackish, greenish & purplish

G — Gateway formation
chiefly thin bedded siliceous metargillites; some dolomite at base (Equivalent of lower part of Moyie formation)

Pu — Purcell Lava
massive basic flows

Kt — Kitchener formation
thin to thick-bedded, greenish-grey quartzite and metargillite; somewhat dolomitic in places

Si — Siyeh formation
thin to thick bedded greenish grey metargillite with massive siliceous magnesian limestone (Equivalent to upr Kitchener formation)

W — Wigwam formation
thin to thick-bedded, red sandstone and metargillite (Equivalent of lower part of Kitchener formation)

C — Creston formation
generally thick-bedded, grey quartzite and metargillite, sometimes dolomitic

Intrusive

Abnormal hornblende gabbro

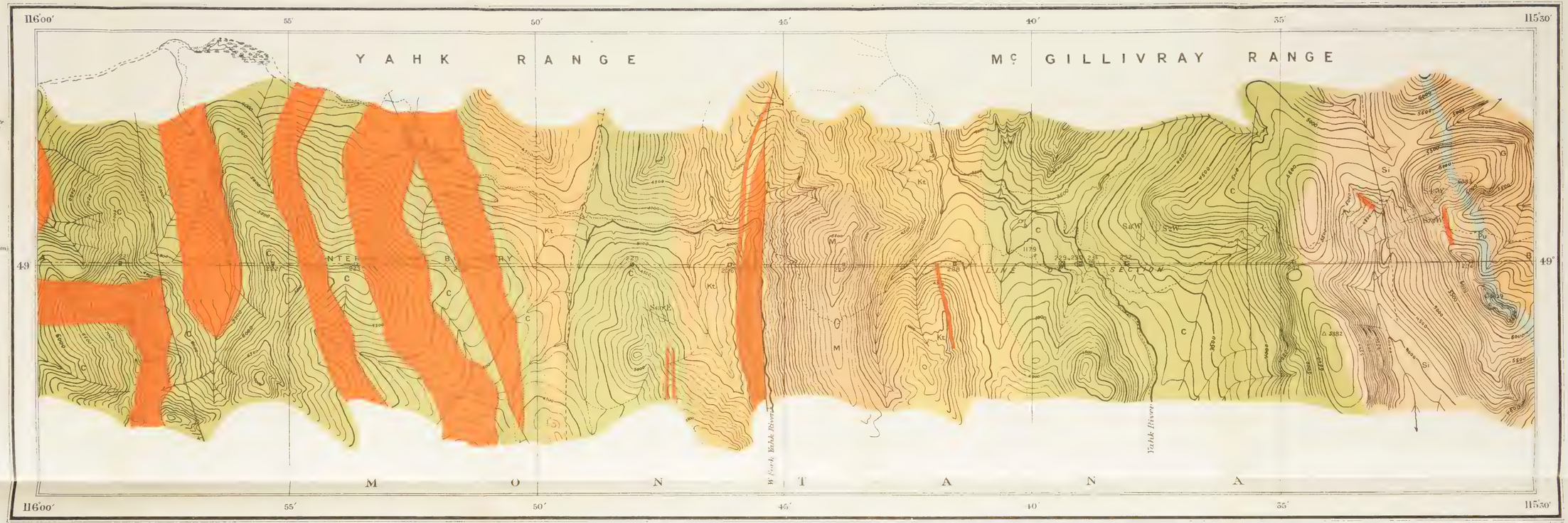
Symbols

Geological boundary

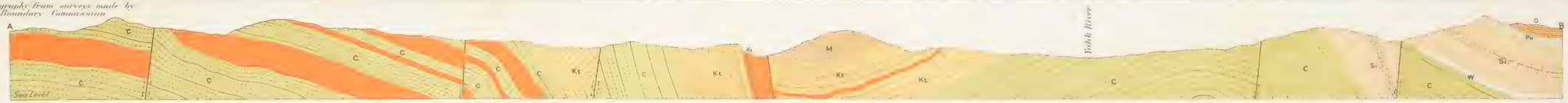
Strike

Glacial striae

Note. Lowlities of chemically analyzed rocks shown thus + 1164



Topography from surveys made by the Boundary Commission



Section on line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles 1 ½ 0 1 2 3 4

Contour interval 100 feet

MAP 77 A

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LEGEND

PLEISTOCENE & RECENT

Glacial drift and alluvium

MISSISSIPPIAN & DEVONIAN MIOCENE

Ks — Kishenehn formation
chiefly bluish-grey clay ; interbeds of grey sandstone ; fossiliferous

Limestone
massive, grey, fossiliferous

R — Roosville formation
light green and grey, thin-bedded metargillite

chiefly MIDDLE CAMBRIAN(?)

P — Phillips formation
purplish to red thin-bedded metargillite & quartzite

G — Gateway formation
chiefly thin-bedded, siliceous metargillite, some dolomite at base

Pu — Purcell lava
massive basalt flow

Si — Siyeh formation
massive, dark grey siliceous magnesian limestone with rough grey-buff metargillite

LOWER CAMBRIAN(?)

W — Wigwam formation
thin- to thick-bedded red sandstone and metargillite

Mc — Macdonald formation
thin to thick-bedded grey metargillite with rare lenses of dolomite

H — Hefty formation
chiefly thick-bedded, reddish sandstone

A — Altyn formation
thin-bedded siliceous dolomite

CAMBRIAN? BELTIAN

Intrusive

Abnormal gabbro

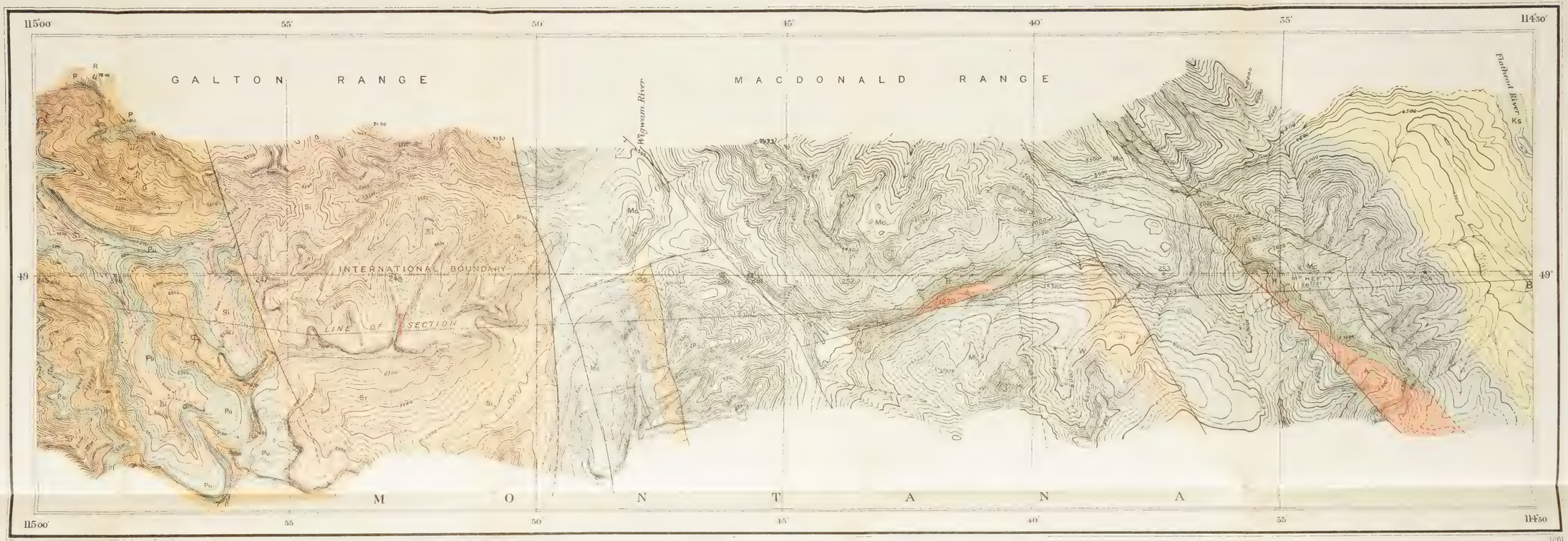
Symbols

Geological boundary

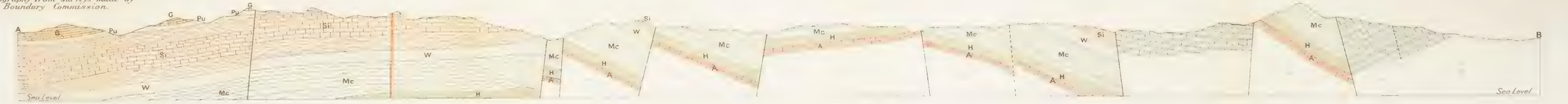
Fault

Glacial Striae

Note. *Localities of chemically analyzed rocks shown thus.* +1250



Topography from surveys made by the Boundary Commission.



Section along line A B

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R. A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles

Contour interval 100 feet

MAP 75 A

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LEGEND

PLEISTOCENE & RECENT

Glacial drift and alluvium
including winged-out marvines of the Flathead valley

MIOCENE

Ks — Kishenehn formation
chiefly bluish-grey clays; interbeds of grey sandstone; fossiliferous

chiefly MIDDLE CAMBRIAN(?)

Kn — Kintla formation
chiefly thin-bedded red argillite and interbedded flow of basic lava

Sh — Sheppard formation
chiefly thin-bedded light grey siliceous dolomite, an interbedded flow of basic lava

Pu — Purcell lava
massive, basic flow

Si — Siyeh formation
chiefly massive, dark grey, siliceous magnesian limestone, also much greenish-grey metargillite

LOWER CAMBRIAN(?)

Gr — Grinnell formation
chiefly thin-bedded red metargillite, an interbedded flow of basic conglomerate

Ap — Appekunny formation
generally thin-bedded, light greenish-grey metargillite; subordinate quartzite and magnesian limestone lenses

BELTIAN

A — Altyn formation
thin to thick-bedded, light grey, generally sandy, siliceous, magnesian limestone; bearing fossil, Beltina danai

Wt — Waterton formation
massive, dark grey, Precambrian dolomite

ARCHEAN(?)

Intrusive

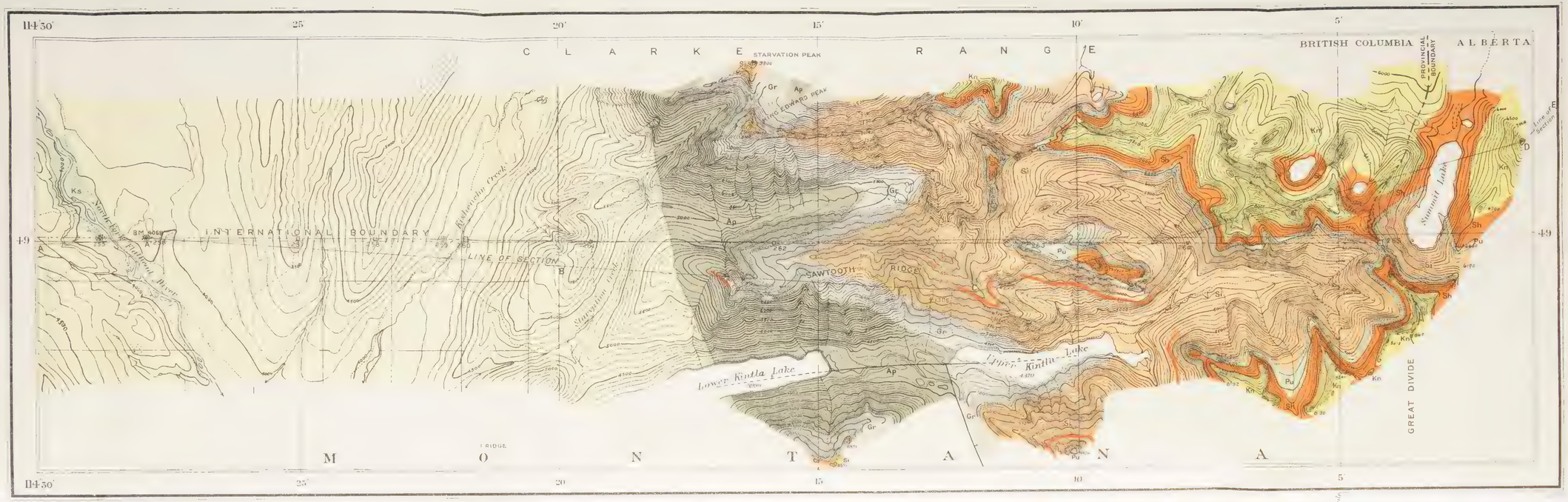
Lamprophyre and Diorite

Symbols

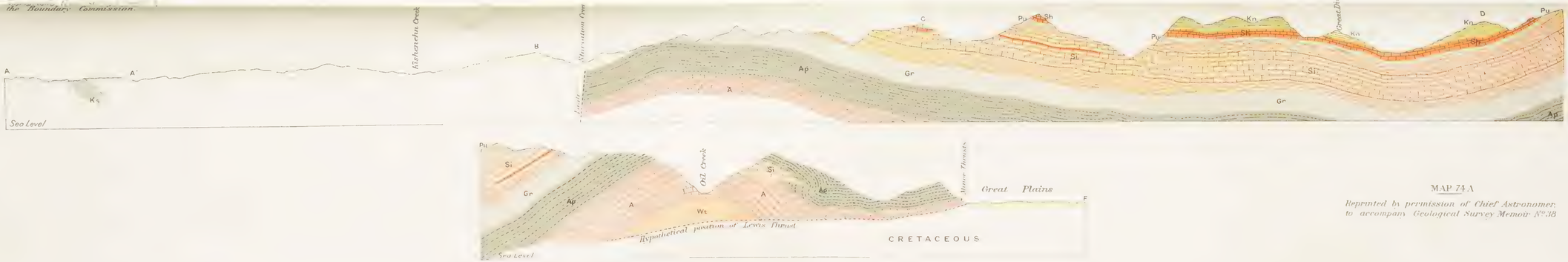
Geological boundary

Fault

Note. *Localities of chemically analyzed rocks, shown thus,* + 1306



the Boundary Commission.



Sections along line AA'BCDEF

GEOLOGY OF THE FORTY-NINTH PARALLEL, By R.A. Daly.

Scale: $\frac{1}{62500}$ = 0·9864 Statute Miles to 1 Inch

Miles

Contour interval, 100 feet

MAP 74 A

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PLATE 73. VIEWS IN THE SELKIRK, COLUMBIA AND CASCADE RANGES.

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Columbia River terrace and the Pend D'Oreille mountains (Selkirk system). Looking southwest from near International Boundary.

Typical view in the Midway Mountains. Looking northeastwardly across Kettle River near bridge six miles above Midway.

Typical view in the Skagit range. Looking east from divide between Middle and Slesse creeks. Chilliwack River valley on the left. View shows accordance of summit levels.

(In pocket.)

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Typical view in the Clarke range. Looking eastward from head of Starvation Creek. The slope in middle of view is composed of the Siyeh formation capped by the Purcell Lava which is overlain by the Kintla formation.

Summit of the Nelson range (Selkirk system). Looking north from a point a half-mile south of the Dewdney trail. Beehive Mountain distant, on the left.

Nelson range, looking west from summit ridge north of Dewdney trail. Ridges of near distance composed of vertical quartzites, etc., of the Summit series.

(In pocket.)

ERRATA

Appendix 6.

Report of the Chief Astronomer 1910

Part III—maps

Sheet 17.—Boundary Monument 19 is 0.94 miles west of Mon. 20
" 15.— " " 59 is 1.02 " " " 60
" 10.— " " 144 should be deleted
" " 145 should read 144
" " 146 " " 145
" " 147 " " 146
" " 148 " " 147
" " 149 " " 148
" " 150 " " 149
" " 151 " " 150
" " 152 " " 151
" " 153 " " 152
" " 154 " " 153
" " 155 " " 154
Sheet 9.— " " 156 " " 155
" " 157 " " 156
" " 158 " " 157
" " 159 " " 158
" " 160 " " 159
" " 161 " " 160
" " 162 " " 161
" " 163 " " 162
" " 164 " " 163
" " 165 " " 164
" " 165 is a few yards east of the railway track near Laurier.
Sheet 5.— " " 207 is 2.72 miles west of Mon. 208
" " 207 should read 208
" " 208 " " 209
" " 209 " " 210
" " 210 " " 211
" " 211 " " 212
" " 212 " " 213
" " 213 " " 214
" " 214 " " 215
" " 215 " " 216
" " 216 " " 217
" " 218 is 0.02 miles east of Mon. 217
" " 217 should read 219
" " 218 " " 220
" " 219 " " 221
" " 220 " " 222
Sheet 4.— " " 221 " " 223
" " 222 " " 224
" " 223 " " 225
" " 224 " " 226
" " 225 " " 227

Sheet 4.— boundary Monument 226 should read 228
(continued) " " 227 " " 229
" " 228 " " 230
" " 229 " " 231
" " 230 " " 232
" " 231 " " 233
" " 232 " " 234
" " 233 " " 235
" " 234 " " 236
Sheet 3.— " " 235 " " 237
" " 236 " " 238
" " 237 " " 239
" " 238 " " 240
" " 239 " " 241
" " 240 " " 242
" " 241 " " 243
" " 244 is 0.22 miles west of Mon. 245
" " 242 should read 245
" " 243 " " 246
" " 244 " " 247
Sheet 2.— " " 245 " " 248
" " 246 " " 249
" " 247 " " 250
" " 248 " " 251
" " 252 is 1.35 miles east of Mon. 251
" " 249 should read 253
" " 250 " " 254
" " 251 " " 255
" " 252 " " 256
" " 257 is 2.59 miles east of Mon. 256
" " 253 should read 258
" " 259 is 2.14 miles east of Mon. 258
" " 254 should read 260
Sheet 1.— " " 255 " " 261
" " 256 " " 262
" " 257 " " 263
" " 258 " " 264
" " 259 " " 265
" " 260 " " 266
" " 261 " " 267
" " 262 " " 268
" " 269 is 0.94 miles west of Mon. 270
" " 263 should read 270
" " 264 " " 271
" " 265 " " 272
" " 273 is 1.16 miles east of Mon. 272

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Sheet 1—Clarke Range.
" 2—Galton Range.
" 3—Rocky Mountain Trench.
" 4—Yahk Range.
" 5—Moyie Range.
" 6—Purcell Trench.
" 7—Pend D'Oreille River.
" 8—Rossland Mountains.
" 9—Christina Lake.
Sheet 10—Midway Mountains.
" 11—Osoyoos Lake.
" 12—Kruger Mountain.
" 13—Okanagan Range.
" 14—Hozomeen Range.
" 15—Skagit Range.
" 16—Chilliwack River.
" 17—Sumas Lake.

Plate 72—Views of the Rocky and Selkirk Ranges.
" 73—Views of the Selkirk, Columbia and Cascade Ranges.
—Erratum Sheet.

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